

ON THE BRITISH SPECIES OF *MORDELLISTENA*  
COSTA (COL.: MORDELLIDAE) RESEMBLING  
*PARVULA* GYLL.

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With the publication of Vol. 8 of Freude, Harde & Lohse, *Die Käfer Mitteleuropas* (1969), it became evident that our British representatives of this family would almost certainly prove more numerous than had yet appeared. The object of these notes is to point out that the *Mordellistena parvula* Gyll. of British catalogues and collections comprises more than one species; and further, that others very similar, not yet recorded here, also occur with us. That much was clear from a study of my very scanty material of the group (strictly speaking not a single homogeneous group, as will appear); which, even on a cursory inspection, was readily seen to be composite.

To identify securely each of the four species hitherto found (distinct enough in themselves), among the very large number included in the key by the late Karl Ermisch in the above-named work, was at first a somewhat daunting task. When, however, the key was perused in greater detail and the sectional characters carefully re-checked, it became a simpler exercise. Finally I was fortunate in having the help of Mr. R. Batten in Holland, the successor to Dr. Ermisch as a specialist in the Mordellidae, who was good enough to verify my eventual determinations.

None of these species can be regarded as other than very uncommon with us, except occasionally at a particular spot. They are the smallest known species of the genus in Britain. Usually they occur by sweeping mixed vegetation, and unlike some others of the genus do not appear to patronize flowers much. The plants with which they are specifically associated have, with one exception, not been well ascertained.

The common feature on which it is convenient to group them together for present purposes is a similar facies or general aspect consequent on the coloration, notably of the pubescence. The four species are split down the middle, as it were, by a very definite structural character; the members of each pair are closely allied. Thus, one pair falls into the first section of Ermisch's key with 63 species, the other into the second with only six. (These sections are treated there as subgenera — see below.) The following key will, it is hoped, enable the four species dealt with here to be determined with little trouble:—

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Small to very small species, never entirely deep black (thus contrasting with the *M. pumila* group) but to the naked eye appearing dark olive-brown to somewhat greenish-grey-black with a silky sheen, by reason of the usually shining yellowish pubescence; appendages in part, notably the anterior coxae and femora, base of antennae, palpi and mouthparts (least clearly in ♀ *parvuloides*), and often front of head narrowly, more or less distinctly paler, yellow-brown to rufous; antennae slightly to decidedly (*parvula*) more elongate in male than in female, except in *nanuloides*.

- 1/4 Hind tibiae with an accessory spur barely half the size of the large one, situated ventrally and visible from the side or behind<sup>1</sup> (sg. *Mordellistena* s.str.<sup>2</sup>). (Length about 2.5-3.3mm.)
- 2/3 Viewed laterally or dorsolaterally, pronotal side-margins in basal half practically straight; hind angles bluntly rounded, obtuse. (Form somewhat variable.) . . . . . *parvula* Gyll.
- 3/2 Viewed thus, pronotal side-margins in basal half distinctly concave; hind angles well-marked, about 90° or less (Form rather robust.) . . . . . *parvuloides* Erm.
- 4/1 Hind tibiae without an accessory spur (sg. *Pseudomordellina* Erm.). Pronotal characters as 3/2, very clearly in *acuticollis*, less so in some *nanuloides*.
- 5/6 Antennae long, exceeding combined length of head and pronotum, segments 5-10 about twice as long as broad; size larger, up to fully 3mm. (More slender and elongate than *parvuloides*.) . . . . . *acuticollis* Schils.
- 6/5 Antennae short, not quite equalling combined length of head and pronotum, segments 5-10 about 1½ times as long as broad; size very small, 2.3-2.8 mm. (Antennae similar in the sexes, unlike *parvula*; head in ♀ entirely black, in ♂ narrowly reddish in front.) . . . . . *nanuloides* Erm.

#### Notes on the species

*M. parvula* (Gyllenhal). — A very distinct species, within its group at once known by the pronotal character given above; its immediate allies include the next. It is indeed surprising that the true *parvula* has so long been confounded with *nanuloides* in Britain (under the former name, of course). Actually, Fowler (1891:73) did distinguish them to some extent, correctly noting the important thoracic difference — other characters he gives appear in part con-

<sup>1</sup>The hind legs in these species should always be set, or disposed, in such a way that it can readily be seen whether or not accessory spurs are present.

<sup>2</sup>Includes all other known British species of the genus apart from the last two above, and *abdominalis* F.

<sup>3</sup>*M. inaequalis* Muls. is now treated as a good species, known only from France.

fused, at least in the light of present knowledge — yet he still referred all British specimens to '*parvula* v. *inaequalis*'<sup>3</sup>, and, except that the varietal name has lately been dropped, British authors and catalogues have continued to do likewise.

The foodplant is perhaps often *Artemisia vulgaris* (mugwort), but it seems likely that other plants too are utilized. Of the single specimens I have taken (Broxbourne, Herts.; Arundel, Sussex) one was shaken from *Achillea millefolium* (yarrow), but mugwort was near at hand; in the other case it was not, but yarrow may have been. Possibly, therefore, the last-named is another host. *M. parvula* is scattered thinly about the south-east and south, extending (according to the records I have) westward to Cornwall and northward to Norfolk. Probably all the localities given by Fowler (*l.c.*) except Sheerness, and by Fowler & Donisthorpe (1913:299), apply to this species.

*M. parvuloides* Ermisch. — On 1st July 1985, I captured a single female by sweeping in oak woodland at Shooters Hill near here (now Oxleas Woods SSSI), very close to the locality for the next species. The actual source of both insects is at present problematic. In the case of *parvuloides* there was little at the spot (which was very shady) but grass, brambles, and oaks. At the time I could only suppose the beetle to be another *acuticollis*, though even in the net it appeared too large and stout. As the exact location was only some 20 yards in from the woodland edge, the possibility of its having strayed from that likelier situation to where it was found cannot be ignored. The host-plant of *parvuloides* seems to be quite unknown. The species is recorded only from the Rhineland, Bavaria, Switzerland, Italy, and Hungary (Ermisch, p.176). It may perhaps be found representing *parvula*, or mixed with that species, in a few collections; or it may be a newcomer to our fauna. This, of course, applies equally to the next species.

The pubescence in my specimen is appreciably a little darker and less shining than in *parvula*, and the mouthparts and antennae considerably darker than appears usual in that species; but whether the latter difference is true of the male also of *parvuloides*, I cannot say.

*M. acuticollis* Schilsky. — Also found at Shooters Hill (see above), where two examples occurred to me in successive years (20.vii.84, 7.vii.85) by general sweeping on the western fringe of the woods verging on Eltham Common. The first was swept amongst long grass with a few nettles intermixed and some taller vegetation consisting of young trees — hawthorn, birch, oak etc.; the second in a rather more exposed spot about 20 yards distant with shorter grass and little else but a few low docks, nearly under an oak. Ermisch (p.187) notes the beetle as having been swept from *Cirsium arvense*, the common field thistle; I therefore gave this plant special

attention where it grew along the edge of the woods, likewise the flowers of hogweed locally present there, but to no avail. (*Artemisia* is a notable absentee.)

The nearest ally of this species is the following, which however is a maritime or estuarine insect. Now that attention has been drawn to them, *acuticollis* and *parvuloides* will surely turn up in other localities. It goes without saying that any *parvula*-like specimen ought to be subjected to careful scrutiny. *M. acuticollis* is recorded from Austria, Hungary, Steiermark, Switzerland, Slovakia, Bavaria, Württemberg, and the Middle Elbe district (Ermisch, *l.c.*). Southern England is, of course, a notable extension north-westward of the known range of this and the last species.

*M. nanuloides* Ermisch. — This is the very small *Mordellistena* formerly taken in abundance at times on *Artemisia maritima* at Sheerness on the Isle of Sheppey, Kent, by J. J. Walker, G. C. Champion and probably others, but confused by British authors with '*parvula* v. *inaequalis*' (see under *M. parvula*). Mr. P. M. Hammond (BMNH) suggested to me its true identity at about the time that I had independently come to the same conclusion. All the BMNH material from several British collections appears to be from the above source, and I know of no other locality in this country; though one would expect the species to exist in other maritime or saltmarsh areas where the sea wormwood occurs, especially perhaps on the east coast. On the Continent also the distribution appears very restricted. Ermisch (p.187) notes that *M. nanuloides* was described from the above-named foodplant in Holland, and gives Meissen in Saxony as the only other record. It would be interesting to know whether it is still present on Sheppey. Even if not, it can hardly fail to turn up again somewhere in our area, since alone of the four species considered here the host-plant is not in doubt.

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CORRIGENDA. Vol. 97, p.137, 1.20 up: for 'Gardener' read 'Gardner'. p.138, 1.21: for the second 'the' read 'that'.